# SU people

FACULTY

## Eleanor Maine | Exploring Cell Development

ELEANOR MAINE IS INTRIGUED by the nuts and bolts of living organisms. As a developmental biologist, she investigates how individual cells differentiate into special cell types to form the basic building blocks of life. "I believe Aristotle was the first known developmental biologist," Maine says, "because he was the first one to compare embryonic development in different animal species."

Maine studied developmental biology throughout her academic career, earning a bachelor's degree at Wesleyan University in Connecticut and a doctorate at Princeton. She then went on to postdoctoral work at the University of Wisconsin-Madison. A member of the SU biology faculty since 1990, she focuses her research on the genetic makeup of a tiny soil worm known as *Caenorhabditis elegans*, to try to determine how trigger mechanisms stimulate cell growth. "In the last 20 years scientists have intensified their efforts to interpret the biochemistry of living beings through genetic research," Maine says. "My basic research on the simple *C. elegans* is helping to construct a road map for higher organisms."

> "Part of my role is to mentor and encourage young women to go into developmental biology."

Maine says *C. elegans* is the ideal subject for molecular and genetic analysis because it's easy to raise, has a three-day life cycle, and has a relatively small number of cells and genes. And it's transparent, so all of its individual cells can be viewed through the lens of a microscope without dissection. "Because *C. elegans* is such a primitive creature, it's easy to remove targeted cells with a laser to see what effect that has on activating or deactivating cell growth," Maine says. "Identifying the specific genes that regulate cell development in *C. elegans* may


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one day point the way for other scientists to create new medical treatments for humans, because both types of organisms have similar signaling pathways."

In addition to being a dedicated researcher, Maine is devoted to teaching the next generation of developmental biologists. She uses small group discussions and the latest educational technology to make her classroom dynamic and interactive. "I'm trying to get away from dusty overheads and static drawings on the chalkboard," she says. "I incorporate videos with slow-motion animation and time-lapse photography into my lectures to convey what vital biological processes are all about."

Undergraduate and graduate students work with Maine in her Lyman Hall laboratory. She says many female students seek to work in her laboratory because they prefer to study with a woman professor. "There's still a subtle bias against women scientists," she says. "Part of my role is to mentor and encourage young women to go into the field of developmental biology. My mentor at the University of Wisconsin was a woman, and it really does make a difference."

Along with tending to her professional responsibilities, Maine also finds time to care for her 2-year-old son, Daniel, through a unique arrangement with her husband, Doug Frank, who is an ecologist on the SU biology department faculty. Although each of them technically holds a full-time faculty position, they are both on half-time academic leave, carrying half the standard teaching load and committee assignments. "When we adopted Daniel from Cambodia we decided we wanted to enjoy as much time with him as possible while he was still young," Maine says. "Doug and I stagger our schedules so we can maximize the time we spend with him."

Maine says this work arrangement gives her the flexibility she needs to continue to be a major data gatherer in her laboratory while still spending ample quality time with her son. "You can be a great scientist and not spend every waking moment thinking about your research," she says. "What matters most is what you do with the time you have—I've become very efficient."

**—Christine Yackel**


## Cia Bruno | Environmental Advocate

AS A YOUNG GIRL GROWING UP IN New York City, Cia Bruno '01 dreamed of being a doctor. Her father worked long hours as a taxicab driver to send her to private schools, where she earned straight A's. Bruno's high marks won her a spot in Harvard's pre-med program, but marriage and motherhood sent her on a different journey. "I took pre-med courses at City College of New York, but was soon overwhelmed by the demands of college coursework and motherhood," Bruno says. "I wasn't doing justice to my children or my grades, so I decided to dedicate myself to raising my three children."

Today, more than two decades later, Bruno is pursuing her life goals as a Syracuse University law student.

Over the years Bruno never lost her unshakable desire to earn a college degree. She kept her interest keen and intellect sharp by taking continuing education courses, and as soon as her children were grown, she headed back to school. By this time, however, she had shifted her focus from medicine to the environment. She completed an associate's degree in natural resources at the SUNY Cobleskill College of Agriculture and Technology and then enrolled at SU, where she studied in the Department of Earth Sciences and received a bachelor's degree. This fall she began her second year of environmental law studies at Syracuse. "During summer vacations I visited my grandparents in rural Puerto Rico, where I made a

connection with nature that most city children don't have an opportunity to experience," Bruno says. "When I went back to school, I decided to follow my heart and do something I love."

Cathryn Newton, dean of the College of Arts and Sciences and former chair of the Earth sciences department, says Bruno's energy and commitment to global environmental issues are exceptional. "Cia combines her technical background with a passion for environmental conservation," Newton says. "She is determined to make a difference with her work."

Bruno is well on her way. She is founder and executive director of TIERRA (To Inculcate Environmental Responsibility, Respect, and Awareness), a Syracuse-based program that provides environmental education for inner-city youths ages 9 to 19. "TIERRA empowers minority youths to become stewards of our natural resources," says Bruno, who designed the educational program and raised funds for the project. "TIERRA offers young people growing up in urban areas an opportunity to explore the world beyond their limited circumstances."

After law school Bruno hopes to play a significant role in international affairs. She got a head start in fall 2000 as a delegate to the United Nations Framework Convention on Climate Change at The Hague, Netherlands. She was one of 250 college students selected from around the country to be members of the U.S. Student Climate Summit sponsored by Greenpeace USA. At the summit, she served as a legal correspondent and analytical aide for Kyoto Treaty protocols aimed at reducing greenhouse-gas emissions, as well as a negotiator with international heads of state. "We received briefings from environmental law experts and gained insights from treaty negotiators," Bruno says. "I returned with an even greater desire to have a positive impact on the world."

Bruno credits much of her success to the guidance she has received from SU faculty and staff. "The law school faculty do everything in their power to help me reach my goals, and the Hendricks Chapel staff encourages me to hang in there when things get tough," she says. "With their support, I've learned to stay focused and never give up."

**—Christine Yackel**


## Francisco Sanin

# An Eye for Urban Design

MANY ARCHITECTS ARE FOND OF saying they were born with a pencil in their hands. In Francisco Sanin's case, it's almost true. "I've always wanted to be an architect," says the School of Architecture professor, who specializes in urban design and urban theories. "I've been drawing since I was a small boy—my father had a collection of cast ancient Roman sculptures. I grew up surrounded by those things and I drew them all."

A native of Colombia, Sanin earned an architectural degree from the Universidad Pontificia Bolivariana in Medellin in 1979. A week after graduation, he and his wife, Angela, who studied philosophy, headed for Europe to expand their horizons in their respective fields. The couple had one-way tickets because they couldn't afford round-trip. "We stayed for 14 years," Sanin says. He eventually began working for a well-known architect, Leon Krier, in London and Belgium. Krier introduced him to some professors at the Architectural Association School of Architecture in London, and Sanin began to get requests to work with students in studios. That's when he caught the teaching bug. "I love teaching," he says. "I have the opportunity to test ideas that I wouldn't have otherwise. The students ground me, but they're also willing to take risks, at least the best ones are. I like that."

Sanin came to SU about five years ago, after teaching at Princeton and the Architectural Association in London. While he teaches a variety of architectural design and theory courses, his main interest is urban design. "I've always been passionate about cities and urban life," Sanin says. "It's very self-indulgent for me because I like cities—I like living in congested places. But I'm also interested in the social and political dimensions of the public realm." Understanding the culture of a city—the differences among its people—is important to an urban architect, he says. "I tell students the value of the city is not always that it's a nice place, but it's always a place to be with other people, where you have to negotiate your presence and your values with other people. It's a place of political, social, and cultural transactions."

His extensive research of urban design includes the development of London


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from the 17th to the 20th centuries. "London is a fascinating city," he says. "There are cities that you see from the air and you sort of understand them. There are cities where a center represents the rest. But London is endless. It's so complex, you can live there all your life and always have something new to discover."

Sanin says it's important for students to understand that many kinds of cities have existed throughout history. "There hasn't been 'a' city," he explains. "They've all had their own logic, their own dynamics, their own pressures to respond to inhabitants." He tries to show his students the many difficulties that arise if you try to impose your own visions of perfection on a city. "Part of the discussion is how to build a city that is vital and creates conditions where many things can happen without perfection being the measure—something that can develop and change and be inclusive of many different people's views and conditions."

Sanin teaches his students how to "read" a city, seeing it not only as real estate, but also as a place of social discourse, representing different values and cultures. Reading those things, an architect can better incorporate a project into the fabric of the city's life. "We need to work with the existing construction and bring it to another level, as opposed to what they did in the '50s," he says. "They would erase half of downtown and construct a beautiful little place that would never be a vital part of the city. Instead of trying to create a perfect place, we could use that potential to make it meaningful and rich."

The best cities, he says, are those that have managed to grow literally on top of their predecessors. "The tragedy is that we've created a vicious circle," Sanin says. "Each generation feels the need to create a city to reflect its own particular view of the world at the exclusion of the others." **—Gary Pallassino**

## Joanne Libertone Gocek

# Bridging the Gap


JOANNE LIBERTONE GOCEK '81, G'00 IS A FUND-RAISING pioneer at SU. She broke new ground in the University's efforts to increase external support when she became head of the newly created Parents Giving Program in 1994. "Other universities such as Cornell, Stanford, Dartmouth, and Duke have well-established parents giving programs," Gocek says. "But this was uncharted territory for SU—I set up our parents giving program from scratch."

Under Gocek's leadership, the Parents Giving Program raised $764,882 from non-alumni parents of current undergraduate students in fiscal year 2000-01. She worked with a committee of 25 parent-couple volunteers who helped her appeal to other SU parents for charitable donations. "This year we exceeded our fund-raising goal by 18 percent," Gocek says. "The Parents Giving Program has exceeded its goal every year because parents know their gifts directly benefit current students and produce immediate results."

Gocek says the University relies on contributions from parents, alumni, corporations, and foundations to help bridge the gap between tuition and the cost of educating students. "Tuition covers only about 79 percent of the actual cost of providing each of our students with a quality education," Gocek says. "Dollars raised through the Parents Giving Program provide unrestricted income to be used wherever Chancellor Shaw sees the greatest need."

Thanks to the Parents Fund, SU recently installed network wiring and updated computer and technical equipment in all University residence halls; invited guest lecturers to campus; acquired new library books; initiated special academic programs; purchased new laboratory and educational technology equipment for classrooms; and expanded student support services. Parents also support SU's individual schools and colleges, the Parents Office Special Needs Fund, the Scholarship Fund, and the Library Fund.

As a former SU student, Gocek knows the impact of such gifts. She studied advertising and marketing at the S.I. Newhouse School of Public Communications before working in media and consumer goods sales. She says her sales experience taught her how to ask for things without fear of rejection. She also credits her graduate education in public administration at the Maxwell School with teaching her how to build positive relationships with different kinds of people—the key to any successful fund-raising effort. "The most rewarding part of my job is the warm relationships I've established with students and parents over the years," Gocek says. "They're like my extended family."

Gocek believes an important part of her role as senior director of the Parents Giving Program is to create a friendly and caring community for students and their parents. In fact, parents with whom she has developed a close personal relationship often ask her to help keep their children on the straight and narrow. "Freshmen can be very fragile because they're overwhelmed by college life—academic and social turmoil, noisy residence halls, heartbreaks," she says. "I enjoy helping students mature into self-confident young adults, and I like to think I've had an influence on them for the better."

Gocek sees herself as an anomaly in the world of institutional advancement at SU because she is the only development officer who works directly with non-alumni parents. "It takes a lot of gumption to ask parents for money," she says. "I'm not shy about it because I know my work will help SU achieve its vision of becoming the nation's leading student-centered research university." **—Christine Yackel**